

HIGH-MECHANICAL STRENGTH COPPER ALLOY

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This application is a continuation-in-part application of
U.S. patent application Ser. No. 09/966,389 filed on September
5 27, 2001, ^{now U.S. Pat. No. 6,893,514} claiming a foreign priority of JP2000-381863 filed on
December 15, 2000.

FIELD

The present invention relates to a high-mechanical strength
10 copper alloy.

BACKGROUND

In accordance with recent trends for miniaturizing and
making electric and electronic machinery and tools having a high
15 performance, a material for components used therein, such as a
connector, has been required to be further improved in all the
features.

For example, a spring sheet used at a contact point of a
connector has been modified to become thinner and thinner, which
20 becomes difficult to keep a sufficient contact pressure. That is,
when the spring sheet is deflected at a contact point of the
connector, a counterforce is generated to give a contact
pressure to make electrical connection. Therefore, the thinner
the sheet is made, the larger the sheet has to be deflected to
25 keep a contact pressure at a similar level. However, when the
sheet is deflected to the extent exceeding an elasticity limit
of the sheet, plastic deformation is occurred. Accordingly,
additional improvement is demanded to prevent plastic